

! FINDPATTERNS on geneseqp:* allowing 0 mismatches

! 1 (R,K) (K) {1,9} R(X) {0,} H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G
! 2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G(X) {0,} (R,K) (K) {1,9} R

ADO44524 ck: 7606 len: 35 ! Ado44524 Human GLP-1 peptide derivative 8S-
2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G(X) {0,} (R,K) (K) {1,9} R
1: H(S) EGTFTSDVSSYLEGQAA (K) EFTIAVLV (K) G(K) K(4) R
HSEGTFTSDVSSYLEGQAAKEFTIAVLVKGKKKKR

ADO44525 ck: 3095 len: 37 ! Ado44525 Human GLP-1 peptide derivative 8S-
2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G(X) {0,} (R,K) (K) {1,9} R
1: H(S) EGTFTSDVSSYLEGQAA (K) EFTIAVLV (K) G(K) K(6) R
HSEGTFTSDVSSYLEGQAAKEFTIAVLVKGKKKKKKR

ADO44523 ck: 2417 len: 33 ! Ado44523 Human GLP-1 peptide derivative 8S-
2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G(X) {0,} (R,K) (K) {1,9} R
1: H(S) EGTFTSDVSSYLEGQAA (Q) EFTIAVLV (N) G(K) K(2) R
HSEGTFTSDVSSYLEGQAAKEFTIAVLVKGKKKKR

ADO44532 ck: 7810 len: 35 ! Ado44532 Human GLP-1 peptide derivative 8S-
2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G(X) {0,} (R,K) (K) {1,9} R
1: H(S) EGTFTSDVSSYLEGQAA (Q) EFTIAVLV (N) G(K) K(4) R
HSEGTFTSDVSSYLEGQAAKEFTIAVLVKGKKKKR

ADO44522 ck: 9935 len: 32 ! Ado44522 Human GLP-1 peptide derivative 8S-
2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G(X) {0,} (R,K) (K) {1,9} R
1: H(S) EGTFTSDVSSYLEGQAA (K) EFTIAVLV (K) G(K) KR
HSEGTFTSDVSSYLEGQAAKEFTIAVLVKGKKR

ADO44526 ck: 1891 len: 40 ! Ado44526 Human GLP-1 peptide derivative 8S-
2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EFTIAVLV (N,K) G(X) {0,} (R,K) (K) {1,9} R
1: H(S) EGTFTSDVSSYLEGQAA (K) EFTIAVLV (K) G(K) K(9) R
HSEGTFTSDVSSYLEGQAAKEFTIAVLVKGKKKKKKKKR

Databases searched:

EMBL, Release 8.0, Released on 4Apr2006, Formatted on 29Apr2006

Total finds: 6

Total length: 457,216,429

Total sequences: 2,589,679

CPU time: 10:15.32

```

11AA SEQUENCE 1.0
ID ADO44522 standard; peptide; 32 AA.
XX
XX AC ADO44522;
XX
XX DT 29-JUL-2004 (first entry)
XX
XX DB Human GLP-1 peptide derivative 8S-des36R-GLP1+2KR.
XX
XX KW GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
XX antidiabetic; anorectic; insulin secretion.
XX
XX OS Homo sapiens.
XX Synthetic.
XX
XX FH Key Location/Qualifiers
XX
XX FT Modified-site 32 /note= "C-terminal amide"
XX
XX FN WO2004037859-A1.
XX
XX PD 06-MAY-2004.
XX
XX PF 10-OCT-2003; 2003WO-JP013020.
XX
XX PR 11-OCT-2002; 2002JP-00299283.
XX
XX PA (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
XX PI Hayashi Y, Makino M, Kouzaki T, Takeda M, Jomori T;
XX WPI; 2004-357426/33.
XX
XX PT New glucagon-like peptide 1 derivatives comprising an added C-terminal
XX peptide, with improved transmucosal absorability used for the treatment
XX of diabetes.
XX
XX PS Example 1; SEQ ID NO 13; 48pp; Japanese.
XX
XX CC The invention relates to peptides consisting of a sequence derived from
XX glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
XX and/or substitution of one or more amino acid residues. The GLP-1 derived
XX peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
XX Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
XX arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
XX 14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
XX IV and to trypsin due to the nature of the substitution. The peptides can
XX be synthesised by standard solid-state peptide synthesis methods. The
XX peptides can be used in the treatment of diabetes (insulin-dependent or
XX insulin non-dependent), obesity and excessive appetite. Sequences
XX ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
XX SQ Sequence 32 AA;

```

ADO44522 Length: 32 June 8, 2007 16:30 Type: P Check: 9935 ..

1 HSEGTFTSDV SSYLEGQAAK EFTIAVLVKGK KR

```

!!AA SEQUENCE 1.0
ID ADO44523 standard; peptide; 33 AA.
XX
AC ADO44523;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human GLP-1 peptide derivative 8S-des36R-GLP1+3KR.
XX
KW GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW antidiabetic; anorectic; insulin secretion.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 33
FT /note= "C-terminal amide"
XX
FN WO2004037859-A1.
XX
PD 06-MAY-2004.
XX
PP 10-OCT-2003; 2003WO-JP013020.
XX
PR 11-OCT-2002; 2002JP-00299283.
XX
PA (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI Hayashi Y, Makino M, Kouzaki T, Takeda M, Jomori T;
XX WPI; 2004-357426/33.
XX
PT New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT peptide, with improved transmemucosal absorability used for the treatment
PT of diabetes.
XX
PS Example 1; SEQ ID NO 14; 48pp; Japanese.
XX
CC The invention relates to peptides consisting of a sequence derived from
CC glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC and/or substitution of one or more amino acid residues. The GLP-1 derived
CC peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC 14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC IV and to trypsin due to the nature of the substitution. The peptides can
CC be synthesised by standard solid-state peptide synthesis methods. The
CC peptides can be used in the treatment of diabetes (insulin-dependent or
CC insulin non-dependent), obesity and excessive appetite. Sequences
CC ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ Sequence 33 AA;

```

ADO44523 Length: 33 June 8, 2007 16:31 Type: P Check: 2417 ..
1 HSEGTFTSDV SSYLEGQAAK EPIAWLVK GK KKR

```

!!AA_SEQUENCE 1.0
ID ADO44524 standard; peptide; 35 AA.
XX
AC ADO44524;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human GLP-1 peptide derivative 8S-des36R-GLP1+5KR.
XX
KW GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW antidiabetic; anorectic; insulin secretion.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 35
FT /note= "C-terminal amide"
XX
FN WO2004037859-A1.
XX
PD 06-MAY-2004.
XX
PF 10-OCT-2003; 2003WO-JP013020.
XX
PR 11-OCT-2002; 2002JP-00299283.
XX
PA (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI Hayashi Y, Makino M, Kouzaki T, Takeda M, Jomori T;
XX WPI; 2004-357426/33.
XX
PT New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT peptide, with improved transmemucosal absorability used for the treatment
PT of diabetes.
XX
PS Example 1; SEQ ID NO 15; 48pp; Japanese.
XX
CC The invention relates to peptides consisting of a sequence derived from
CC glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC and/or substitution of one or more amino acid residues. The GLP-1 derived
CC peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC 14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC IV and to trypsin due to the nature of the substitution. The peptides can
CC be synthesised by standard solid-state peptide synthesis methods. The
CC peptides can be used in the treatment of diabetes (insulin-dependent or
CC insulin non-dependent), obesity and excessive appetite. Sequences
CC ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ Sequence 35 AA;

```

ADO44524 Length: 35 June 8, 2007 16:31 Type: P Check: 7606 ..

1 HSEGTFTSDV SSYLEGQAAK EFIAWLVKGK KKKKR

```

!!AA_SEQUENCE 1.0
ID ADO44525 standard; peptide; 37 AA.
XX
AC ADO44525;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human GLP-1 peptide derivative 8S-des36R-GLP1+7KR.
XX
KW GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
XX anti-diabetic; anorectic; insulin secretion.
XX
OS Homo sapiens.
XX Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 37 /note= "C-terminal amide"
XX
XX WO2004037859-A1.
XX
XX 06-MAY-2004.
XX
XX 10-OCT-2003; 2003WO-JP013020.
XX
XX 11-OCT-2002; 2002JP-00299283.
XX
XX (SANG ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
XX Hayashi Y, Makino M, Kouzaki T, Takeda M, Jomori T;
XX WPI; 2004-357426/33.
XX
XX New glucagon-like peptide 1 derivatives comprising an added C-terminal
XX peptide, with improved transmemucosal absorability used for the treatment
XX of diabetes.
XX
XX Example 1; SEQ ID NO 16; 48pp; Japanese.
XX
XX The invention relates to peptides consisting of a sequence derived from
XX glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
XX and/or substitution of one or more amino acid residues. The GLP-1 derived
XX peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
XX Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
XX arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
XX 14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
XX IV and to trypsin due to the nature of the substitution. The peptides can
XX be synthesised by standard solid-state peptide synthesis methods. The
XX peptides can be used in the treatment of diabetes (insulin-dependent or
XX insulin non-dependent), obesity and excessive appetite. Sequences
XX ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
XX Sequence 37 AA;

```

ADO44525 Length: 37 June 8, 2007 16:31 Type: P Check: 3095 ..

1 HSEGTFTSDV SSYLEGQAAK EPIAWLVKSK KKKKKK

!!AA SEQUENCE 1.0
ID ADO44526 standard; peptide; 40 AA.
XX
AC ADO44526;
XX
XX
DT 29-JUL-2004 (first entry)
XX
DE Human GLP-1 peptide derivative 8S-dee36R-GLP1+10XR.
XX
KW GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW antidiabetic; anorectic; insulin secretion.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
PH Key Location/Qualifiers
FT Modified-site 40
FT /note= "C-terminal amide"
XX
XX WO2004037859-A1.
XX
XX
PD 06-MAY-2004.
XX
XX 10-OCT-2003; 2003WO-JP013020.
XX
XX 11-OCT-2002; 2002JP-00299283.
XX
XX (SANW) SANWA KAGAKU KENKYUSHO CO LTD.
XX
XX Hayashi Y, Makino M, Kouzaki T, Takeda M, Jomori T;
XX WPI; 2004-357426/33.
XX
XX
PT New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT peptide, with improved transmembrane absorbability used for the treatment
PT of diabetes.
XX
XX Example 1; SEQ ID NO 17; 48pp; Japanese.
XX
XX The invention relates to peptides consisting of a sequence derived from
CC glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC and/or substitution of one or more amino acid residues. The GLP-1 derived
CC peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC 14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC IV and to trypsin due to the nature of the substitution. The peptides can
CC be synthesised by standard solid-state peptide synthesis methods. The
CC peptides can be used in the treatment of diabetes (insulin-dependent or
CC insulin non-dependent), obesity and excessive appetite. Sequences
CC ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ Sequence 40 AA;

ADO44526 Length: 40 June 8, 2007 16:30 Type: P Check: 1891 ..

1 HSEGTFTSDV SSYLEGQAQK EFTAWLVKXK KKKKKKKKKR

11AA SEQUENCE 1.0
 ID ADO44532 standard; peptide; 35 AA.
 XX
 AC ADO44532;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DB Human GLP-1 peptide derivative 8S26Q34N-des36R-GLP1-5KR.
 XX
 KW GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
 KW antidiabetic; anorectic; insulin secretion.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 35
 FT /note= "C-terminal amide"
 XX
 PN WO2004037859-A1.
 XX
 PD 06-MAY-2004.
 XX
 PF 10-OCT-2003; 2003WO-JP013020.
 XX
 PR 11-OCT-2002; 2002JP-00299283.
 XX
 PA (SANW) SANWA KAGAKU KENKYUSHO CO LTD.
 XX
 PI Hayashi Y, Makino M, Kousaki T, Takeda M, Jomori T;
 XX
 DR WPI; 2004-357426/33.
 XX
 PT New glucagon-like peptide 1 derivatives comprising an added C-terminal
 PT peptide, with improved transmembrane absorbability used for the treatment
 PT of diabetes.
 XX
 PS Example 1; SEQ ID NO 23; 48pp; Japanese.
 XX
 CC The invention relates to peptides consisting of a sequence derived from
 CC glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
 CC and/or substitution of one or more amino acid residues. The GLP-1 derived
 CC peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
 CC Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
 CC arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
 CC 14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
 CC IV and to trypsin due to the nature of the substitution. The peptides can
 CC be synthesised by standard solid-state peptide synthesis methods. The
 CC peptides can be used in the treatment of diabetes (insulin-dependent or
 CC insulin non-dependent), obesity and excessive appetite. Sequences
 CC ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
 XX
 SQ Sequence 35 AA;

ADO44532 Length: 35 June 8, 2007 16:31 Type: P Check: 7810 ..

1 HSEGTFTSDV SSYLEGQAAQ EFTIAVLVNGK KKKKK

! FINDPATTERNS on uniprot:* allowing 0 mismatches

! 1 (R,K) (K) {1,9} R(X) {0,} H(A,S) EGTFTSDVSSYLEGQAA(K,Q) EPIALV(N,K) G
! 2 H(A,S) EGTFTSDVSSYLEGQAA(K,Q) EPIALV(N,K) G(X) {0,} (R,K) (K) {1,9} R

Databases searched:

UNIPROT, Release 7.2, Released on 7Mar2006, Formatted on 7Mar2006

Total finds: 0
Total length: 925,015,592
Total sequences: 2,849,598
CPU time: 17:54.40

! FINDPATTERNS on pir:* allowing 0 mismatches

```
! 1 (R,K) (K) {1,9} R(X) {0,} H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EPIAWLV(N,K) G
! 2 H(A,S) EGTFTSDVSSYLEGQAA (K,Q) EPIAWLV(N,K) G(X) {0,} (R,K) (K) {1,9} R
```

Databases searched:

NBRF, Release 80.0, Released on 31Dec2004, Formatted on 21Jun2005

Total finds: 0

Total length: 96,216,763

Total sequences: 283,416

CPU time: 01:50.42